

Mineral Industry Surveys

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SILICON IN JUNE 2005

Preliminary data for June 2005 indicate that domestic production and net shipments of silicon ferroalloys plus metal, on a gross-weight basis, decreased by 1% and 7%, respectively, compared with that in May 2005, according to the U.S. Geological Survey. Stocks decreased by 4% compared with those of May 2005, owing to adjustments in inventory and in-plant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys.

Domestic production and shipments of ferrosilicon and silicon metal during the second quarter of 2005 were 4% higher and 2% lower, respectively, than those of the first quarter of 2005. Domestic production and net shipments of ferrosilicon and silicon metal during the first half of 2005 were 3% higher and 2% lower, respectively, compared with the revised amounts during the first half of 2004 [182,000 t (production) and 169,000

t (shipments)]. All domestic data for ferrosilicon have been combined to avoid disclosing company proprietary data.

Based on a gross-weight comparison of May 2005 export data (table 2) with those of the April 2005, ferrosilicon exports increased by 48%, owing to an increase in the ferrosilicon, more than 55% silicon, trade category. Silicon metal exports increased by 15% over the same period, owing to an increase in the "other" silicon metal trade category.

Based on a gross-weight comparison of May 2005 import data (table 3) with those of the April 2005, ferrosilicon imports decreased by 17%, owing to a decrease in the ferrosilicon, 55% to 80% silicon, other, ferrosilicon trade category. Silicon metal imports decreased by 17% because of decreases in all silicon metal trade categories.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
June 2	56.00-58.00	49.50-50.00	77.00-80.00
June 9	55.00-57.00	49.50-50.50	77.00-79.00
June 16	54.00-56.00	49.00-50.00	77.00-79.00
June 23	53.00-55.00	47.00-49.00	76.00-78.00
June 30	53.00-55.00	46.75-48.00	76.00-78.00

¹Source: Ryan's Notes, North American transaction price.

²Source: Platts Metals Week, dealer import price.

TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2005^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, June 30
	June	Year to date	June	Year to date	
Ferrosilicon, all grades ^{5, 6}	19,300	109,000	15,800	94,100	18,300
Silicon metal, excludes semiconductor grades	12,800	78,000 ⁷	11,200	71,500 ⁷	8,780

¹Data are rounded to no more than three significant digits.

²Includes U.S. Geological Survey estimates.

³Data for silvery pig iron (less than 25% silicon) withheld to avoid disclosing company proprietary data.

⁴Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

⁵Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

⁶Includes miscellaneous silicon alloys.

⁷Includes revisions to previous months' data.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MAY 2005^{1, 2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	1,300	778	\$1,110,000	4,150	2,490	\$3,820,000
Colombia	5	4	7,800	11	8	15,600
Malaysia	--	--	--	11	8	15,600
Mexico	91	55	112,000	531	318	660,000
Netherlands	16	12	26,500	65	50	105,000
Total	1,410	849	1,260,000	4,760	2,870	4,620,000
Other ferrosilicon:						
Canada	290	145	292,000	1,210	602	1,290,000
Colombia	14	6	19,500	27	13	39,000
Costa Rica	--	--	--	9	5	11,600
Germany	--	--	--	22	8	26,400
Mexico	58	29	69,800	338	169	387,000
Spain	6	3	7,620	13	6	14,100
United Kingdom	--	--	--	4	2	3,050
Total	368	184	389,000	1,620	806	1,770,000
Total ferrosilicon	1,780	1,030	1,650,000	6,380	3,680	6,390,000

See footnotes at end of table.

TABLE 2--Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MAY 2005^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
China	143	XX	\$6,360,000	687	XX	\$34,000,000
Finland	10	XX	325,000	87	XX	2,770,000
Germany	192	XX	8,150,000	825	XX	33,800,000
Italy	13	XX	977,000	44	XX	3,820,000
Japan	530	XX	36,000,000	2,830	XX	155,000,000
Korea, Republic of	74	XX	4,900,000	394	XX	22,200,000
Malaysia	5	XX	815,000	38	XX	6,870,000
Norway	100	XX	3,850,000	602	XX	20,700,000
Taiwan	59	XX	2,710,000	195	XX	8,750,000
United Kingdom	34	XX	2,440,000	162	XX	9,090,000
Other (35 countries)	44	XX	2,560,000	162	XX	9,210,000
Total	1,200	1,200 ^e	69,100,000	6,030	6,030 ^e	306,000,000
99.00% - 99.99% silicon:						
Australia	--	--	--	12	12	16,600
Brazil	61	60	161,000	323	320	823,000
France	3	3	3,710	143	141	374,000
Germany	--	--	--	48	47	114,000
India	--	--	--	27	27	75,800
Japan	2	2	2,640	30	30	49,400
Mexico	--	--	--	15	15	28,900
Sweden	7	7	9,690	10	10	14,600
Trinidad and Tobago	--	--	--	14	13	24,300
United Kingdom	2	2	3,330	47	47	66,200
Other (5 countries)	--	--	--	19	19	26,400
Total	75	74	180,000	687	681	1,610,000
Other silicon:						
Canada	544	528	551,000	1,150	1,120	1,200,000
China	372	361	491,000	478	464	681,000
Germany	2	2	2,650	29	29	41,500
Italy	5	5	7,040	27	26	35,700
Japan	33	33	220,000	212	206	602,000
Korea, Republic of	--	--	--	413	401	545,000
Mexico	54	52	140,000	205	199	590,000
Netherlands	16	15	197,000	117	113	953,000
Philippines	82	79	108,000	82	79	108,000
Russia	--	--	--	224	218	296,000
Other (14 countries)	5	5	8,260	88	85	362,000
Total	1,110	1,080	1,720,000	3,020	2,930	5,410,000
Total silicon metal	2,390	2,360	71,000,000	9,740	9,640	313,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MAY 2005^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55% - 80% silicon, over 3% Ca:						
Argentina	20	12	\$29,500	20	12	\$29,500
China	--	--	--	38	17	53,000
France	36	22	53,100	72	44	106,000
Germany	--	--	--	10	6 ³	13,300
United Kingdom	--	--	--	5	3	28,900
Total	56	34	82,600	145	82	231,000
55% - 80% silicon, Other:						
Brazil	193	143	159,000	513	383	436,000
Canada	1,110	842	1,060,000	4,940	3,730	4,570,000
China	8,660	6,590	5,700,000	53,800	40,900	37,600,000
France	407	275	760,000	1,680	1,170	3,280,000
Germany	34	26	178,000	203	149	920,000
India	--	--	--	20	14	19,000
Norway	917	680	1,190,000	10,100	7,570	9,800,000
Russia	6,940	5,210	4,860,000	24,700	18,400	17,300,000
Slovenia	39	26	59,500	39	26	59,500
Venezuela	4,790	3,650	3,670,000	22,100	16,600	17,300,000
Other (United Kingdom)	8	6	59,800	8	6	59,800
Total	23,100	17,400	17,700,000	118,000	88,900	91,400,000
Magnesium ferrosilicon:						
Argentina	216	96	207,000	753	346	681,000
Brazil	391	173	357,000	1,070	476	967,000
Canada	642	296	607,000	2,490	1,150	2,380,000
China	279	126	222,000	2,390	1,120	1,680,000
France	9	4	7,000	29	14	29,200
Germany	--	--	--	15	9	34,000
India	20	5	20,000	41	19 ³	61,100
Japan	47	23	72,600	127	60	191,000
Netherlands	272	127	239,000	573	267	489,000
Norway	531	249	492,000	4,340	2,020	3,810,000
Total	2,410	1,100	2,220,000	11,800	5,470	10,300,000
Other ferrosilicon:						
Brazil	--	--	--	20	10	41,700
Canada	716	241	480,000	3,940	1,110	2,860,000
China	20	7	24,100	138	52	141,000
Germany	(4)	29 ³	4,470	(4)	30	6,990
India	--	--	--	191	123	232,000
Russia	998	449	424,000	1,520	697	656,000
Ukraine	4	2	3,270	22	11	18,300
Total	1,740	728	937,000	5,830	2,030	3,960,000
Total ferrosilicon	27,300	19,300	20,900,000	136,000	96,500	106,000,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MAY 2005^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
China	2	XX	\$60,700	9	XX	\$166,000
Denmark	(4)	XX	84,800	2	XX	777,000
Germany	59	XX	5,080,000	420	XX	32,600,000
Italy	55	XX	2,400,000	153	XX	7,090,000
Japan	31	XX	3,520,000	225	XX	17,300,000
Korea, Republic of	7	XX	822,000	49	XX	3,420,000
Norway	--	XX	--	1	XX	120,000
Philippines	--	XX	--	179	XX	253,000
Poland	--	XX	--	10	XX	29,900
Spain	1	XX	4,860	3	XX	24,000
Other (4 countries)	1	XX	68,800	2	XX	115,000
Total	155	155 ^e	12,000,000	1,050	1,050 ^e	61,900,000
99.00% - 99.99% silicon:						
Australia	621	616	1,070,000	3,560	3,540	6,150,000
Brazil	3,690	3,660	5,010,000	20,800	20,600	27,300,000
Canada	1,950	1,930	3,180,000	7,960	7,890	12,700,000
China	(4)	(4)	2,850	(4)	(4)	2,850
France	100	99	132,000	940	933	1,240,000
India	114	113	167,000	114	113	167,000
Norway	552	549	1,150,000	3,180	3,160	7,700,000
Philippines	266	265	401,000	1,050	707 ³	1,600,000
South Africa	2,240	2,220	3,340,000	13,900	13,700 ³	19,500,000
Sweden	--	--	--	24	24	164,000
Total	9,530	9,460	14,400,000	51,500	50,700	76,500,000
Other silicon:						
Belgium	--	--	--	74	8 ³	81,200
Brazil	1,040	1,020	1,610,000	5,510	5,430	7,540,000
Canada	1,090	1,070	1,900,000	4,600	4,500	7,980,000
China	452	445	470,000	1,730	1,700	1,880,000
Japan	--	--	--	20	(4) ³	32,000
Norway	203	199	309,000	2,530	2,480	3,790,000
Philippines	--	--	--	31	20	42,600
South Africa	--	--	--	230	224	274,000
Sweden	71	12	77,600	77	12	83,900
Ukraine	--	--	--	160	157 ³	250,000
Other (3 countries)	310	300	653,000	750	734	1,240,000
Total	3,160	3,050	5,020,000	15,700	15,300	23,200,000
Total silicon metal	12,800	12,700	31,500,000	68,200	67,000	162,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.